

Cancun Tourism Cluster, Q. Roo, México

Country Competitiveness Project

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Abstract— *The present work allows to define an efficient development alternative on the execution of services in non-traditional sectors, with tourism being a sector that has generated a change in the business vision and an alternative of local development, it becomes an important axis that links to industries and services and energizes the economy worldwide.*

Keywords— *Tourism, Cluster Map, Competitiveness, Value Chain and Shared Value.*

I. INTRODUCTION

The global tourism position of 10 countries worldwide as the most visited destinations, Mexico is positioned as the sixth most important destination, concentrating a significant and growing number of visitors worldwide. (OMT, 2018)

Tourism GDP for Mexico contributes 3.3% in 2018 on the economy of the country, which is complemented by the growth of the original GDP for the tertiary sector where it shows a growth of 2.87% in 2018, with these parameters the impact of the tourism sector on the generation of income in the financial movement that drives economic sectors and as a means of revitalizing society. (Datatur SECTUR, 2018)

The regional sectorization of tourism in Mexico, shows that the third most visited destination after Mexico City and the Riviera Maya, is Cancun, currently represents the best tourist offer in Mexico, receiving both national and international tourists in a significant percentage.

The Cluster of companies that represents the tourism industry in Cancun surpasses any other region in Mexico according to the Geographic Location Coefficient (icluster, 2014) (INEGI, 2014). The presence of global chains of Hospitality of Gran Turismo in the region of Cancun, as tractor companies and development promoters, compete with each other and have access to the same services. An important presence of tourism-related industry that has permeated the growth and expansion of the region, generating links between different sectors of society, promoting important public-private partnerships.

The integration of other industrial sectors, service providers have grown due to the presence of the tourism sector in the region, promoting the construction of specific institutions supporting the sector.

1.1 CONTEXT AND GENERALITIES

1.1.1. Macroeconomic and Political Environment in Mexico

The Mexican economy grew at a moderate rate of 2% per year during the first half of 2018, due to uncertainty about the renegotiation of the North American Free Trade Agreement (NAFTA), now the United States-Mexico-Canada Agreement (USMCA), and around the presidential elections weighed on the investment.

Private consumption remained the main driver of growth on the demand side. Until the middle of 2018, oil production, which decreased to 1.9 million barrels per day (bpd) at the end of 2017 - from 2.6 million bpd five years earlier - reversed its trend, since large investments in extraction are progressing slowly (World Bank, 2018).

Consumer price inflation at the beginning of 2018 has been moderate, after the 16-year peak of 6.8% reached in December 2017. However, currency depreciation and increases in energy prices slowed down the trend towards 3% target rate, causing the Bank of Mexico to raise its interest rate in June to a maximum of 10 years of 7.75%. With the 2018 elections and NAFTA, now called the United States-Mexico-Canada Agreement (USMCA), uncertainty factors should tend to diminish and support an investment recovery. The resumption of the downward trend in consumer price inflation is expected to support real income growth, which will strengthen consumption and reduce monetary poverty (Government M., 2018).

The fragility in the currency and asset markets before the presidential elections was reversed by the beginning of August 2018, when the economic team of the incoming administration expressed its commitment to prudent fiscal and monetary policies that imply a continuous adherence to the framework of Fiscal Responsibility, as well as the principle of independence of the Bank of Mexico (World Bank, 2018).

The consensus of expectations points towards a slowdown in growth - from 2.1% in 2018 to 1.8% in 2019-. The main risks can be classified into external and internal. On the external side, the global economy, and especially that of the United States, was in slowdown. Likewise, emerging markets

remain vulnerable to a tightening of international trade tensions. As regards the internal part, the change of regime in Mexico has generated uncertainty about the future direction of economic policy. Although the new administration reiterated its commitment to macroeconomic and financial stability, certain decisions - including the cancellation of the airport - have raised some doubts about this commitment. Similarly, the learning curve for a new administration usually results in a slow displacement of investment and public spending and delays in VAT (Value Added Tax) recovery for companies. Although external accounts and public debt ratios remain healthy, the Mexican economy had a growth closer to 1% in 2018 than in 2017. (El Economista, 2019)



Graph 1

Comparison of Global Economic Growth 2017

Source: (INEGI & GDP and National Accounts, Comparative Global Economic Growth 2017)

1.1.2. Political Factors

Andrés Manuel López Obrador (AMLO) emerged as the winner of the presidential election of July 01, 2018 in Mexico, obtaining about half of the popular vote. The political coalition of AMLO, dominated by the National Regeneration Movement (Morena), a left-wing party was founded in 2014, became the largest group in Congress, which sets the stage for the new president to implement his legislative agenda. The new president took office on December 01, 2018.

President AMLO's ability to sustain GDP growth and stability, while meeting other public policy objectives, will determine the credit rating of Mexico.

AMLO began his political career in 1976 with the then dominant political party of Mexico, the Institutional Revolutionary Party (PRI). In 1989, he left the PRI to join the leftist Democratic Revolution Party (PRD). He participated unsuccessfully as a presidential candidate for the PRD in 2006

and 2012. Later, he founded Morena in 2014 taking with him many militants and electoral base of the PRD.

AMLO assumed the presidency at a time when the country's economy is stable, with manageable fiscal and current account deficits, a low level of inflation, and a moderate burden of the general government's net debt. The ability of the new president of Mexico to sustain GDP growth and stability while meeting other policy objectives will help determine the trajectory of S&P Global Ratings' credit ratings on the sovereign (our Mexican ratings are BBB + / Stable / A-2 [foreign currency] and A- / Stable / A-2 [local currency]) (Mexican stock exchange, 2019).

Some of the main challenges that the new government would face include the fight against corruption, the strengthening of the exercise of the law, the sustainability of economic growth and the conclusion of the renegotiation of USMCA.

Much of the political left opposed NAFTA when it was proposed in the early 1990s. Currently, NAFTA has become an integral part of the Mexican economy with a profound impact. It helped establish a flourishing manufacturing sector that became a powerful engine of growth for many years. The growing economic integration, through trade and investment, transformed a large part of the northern and central regions of Mexico into a global manufacturing base, generating well-paid jobs and helping to build a middle class.

Mexico has a low rating in international studies of corruption and governance. The quality of education offered by the government is low, according to international reports, even in spite of the substantial public expenditure allocated to it, which limits the country's ability to prosper by creating a better qualified workforce.

Many Mexicans perceive that their country has a comparatively weak capacity of their public institutions (such as courts, electoral authorities, police, prosecutors, and government secretariats) to solve problems and handle conflicts. As a result, there is the impression of entrenched injustices and arbitrariness in public life, in government decisions and in legal and regulatory decisions. Such perceptions contributed, in part, to the defeat of the PRI and its candidates in the recent elections.

According to the Global Competitiveness Report (GCI) competitiveness report for 2017-2018, Mexico is located in position 51 of the competitiveness ranking (WEF, 2017-2018).

Figure 2 shows its behavior in the indicators measured by this index and the most problematic factors for doing business.

1.2.1 Historical Background

One of the main economic factors of Mexico is tourism, it has existed since the 1920s, and it has been a fundamental engine for the Mexican economy generating many sources of employment, having states that only dedicate themselves to this work,

Three stages of growth in Mexico are considered, the first one covers when all the laws began to be created so that any foreigner could enter the country and invest, and all the regulations so that any businessman or hotelier could create his establishment. The second stage was the development of large hotels and the exploitation of tourist sites until the 58s, and the third stage covers from that date until today that you can see more beaches and better hotel establishments and large restaurants.

1.2.2 General Tourism Structure

The Ministry of Tourism, focused on achieving the objective of the National Development Plan 2013-2018 (NDP), which is to maintain the country's macroeconomic stability, and particularly take advantage of Mexico's tourism potential to generate a greater economic spill, has worked in order to position this activity, during the last five years, as a fundamental engine of the national economy.

To achieve this goal, the National Tourism Policy has been delineated in four guidelines: I) Sector Management and Transformation; II) Innovation and Competitiveness; III) Promotion and Promotion; and IV) Sustainability and Social Benefit, which have guided efforts to boost the six segments into which the sector is divided: sun and beach; cultural tourism; ecotourism and adventure; health tourism; sports tourism; and specialized luxury tourism. All this is to manage the actions of this administration and turn Mexico into a world tourism power (Government M. , 2013).

With the objective of reinforcing this development, the Government of the Republic designed the Sectorial Tourism Program 2013-2018, whose strategic vision is "open Mexico to the world and bring the world to Mexico", becoming the norm to direct the role it has This dependence fully exploits the potential of the country's tourist attractions.

These actions have made tourism become a strategic sector of the economy, with high growth rates in employment, foreign exchange income and the domestic product.

1.2.3 Recent Trends

The magazine "Transport and Tourism " expresses the intention of visitors worldwide to know Mexico.

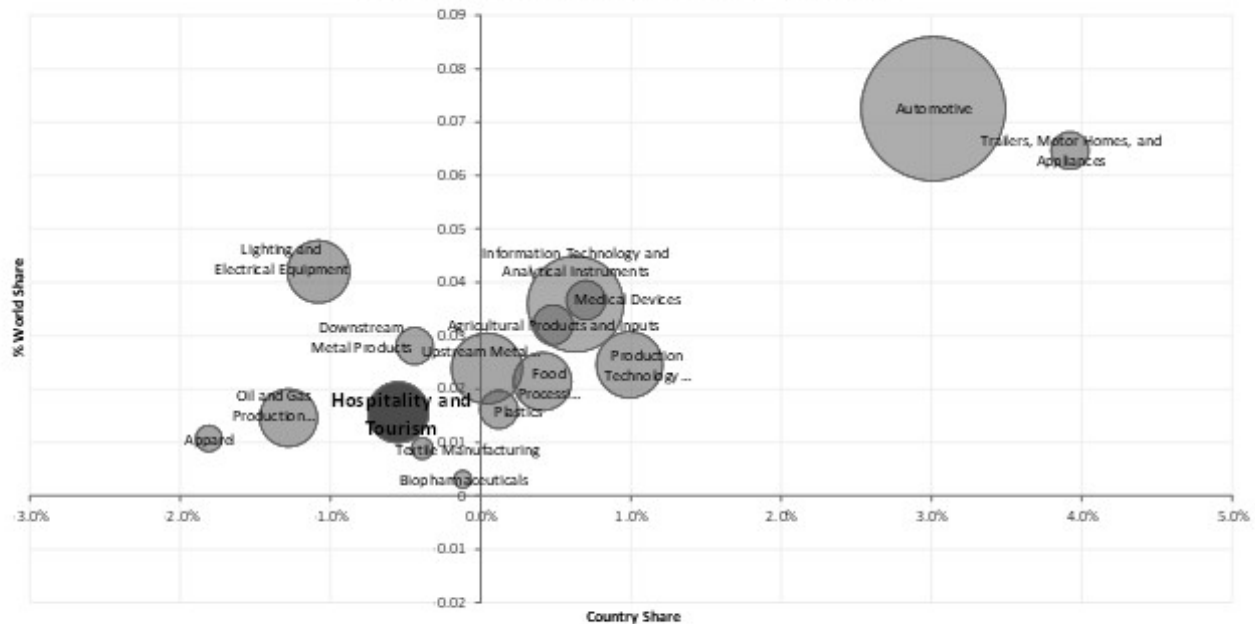
The first months of 2018 brought with it a global growth of 6% within the tourism industry, the World Tourism Organization (UNWTO) reported. This increase has been possible thanks to the diversity of destinations currently offered in the world, coupled with greater digitalization of services and growth in the offer of experiences (Sánchez-Crispín & Propin - Frejomil, 2011).

Based on this data and based on the preferences of its users, Mobility ADO shared the five trends that will mark the tourism sector in 2019.

1. For next year, Mexico City, Cancun and Rivera Maya will not only be important destinations for national tourism, but on the global scale they will be positioned as the places that should be visited according to information from Lonely Planet. This is due to the wide billboard that it offers in cultural and sports matters, as it hosts exhibitions, international competitions and is the place where the most important traditions of the country meet.
2. One of the priorities of tourism companies should be the implementation of more agile transfers, not only from one city to another, but from the moment the traveler goes to the terminal. Offer connection points that allow tourists to leave their cars at home and arrive directly to their transport.
3. The use of mobile devices has gained great importance for Latin American tourists, who use it for planning their trips and conducting research on the sites of interest.
4. The generations known as Millennials and Centennials begin to take possession as the consumers they command in the market. It is also important that the products and services they consume comply with a clear interest in the environment, therefore, transport companies have chosen to use units that generate fewer polluting emissions.
5. Tourist destinations must add new attractions that complement the trip and become an unrepeatable experience

Figure 2 shows its behavior in the indicators measured by this index and the most problematic factors for doing business.

2016 Cluster Country Export (80/20) - México



Source: Cluster Mapping, Institute for Strategy and Competitiveness, HBS

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In summary, for this 2019, the most important thing will be to think about simplifying the processes for the traveler, improving their experiences and saving time for a better trip. (Transport and Tourism Magazine, 2018).

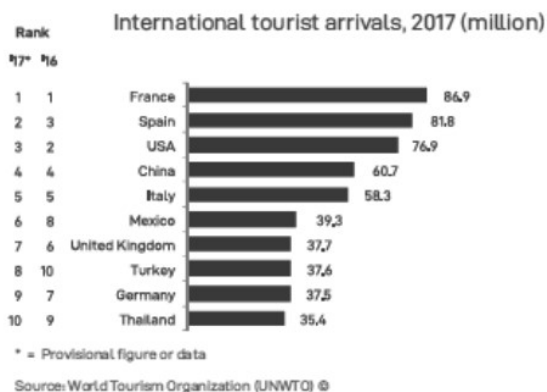
Figure 4 shows the behavior of the different industries (80/20) for Mexico. In Annex 3, more detailed information can be observed.

Graph 4 Cluster Country Export México, 2016

According to information from the Ministry of Communications and Transportation (SCT), we find that the influx of both national and international passengers between the different cities of the country, Cancun is an airport with a lot of visitor traffic (Graphs 5 and 6).

1.3 Mexico tourism comparison with other countries

Mexico is positioned as the sixth country worldwide to be the destination that international visitors prefer, according to the World Tourism Organization.

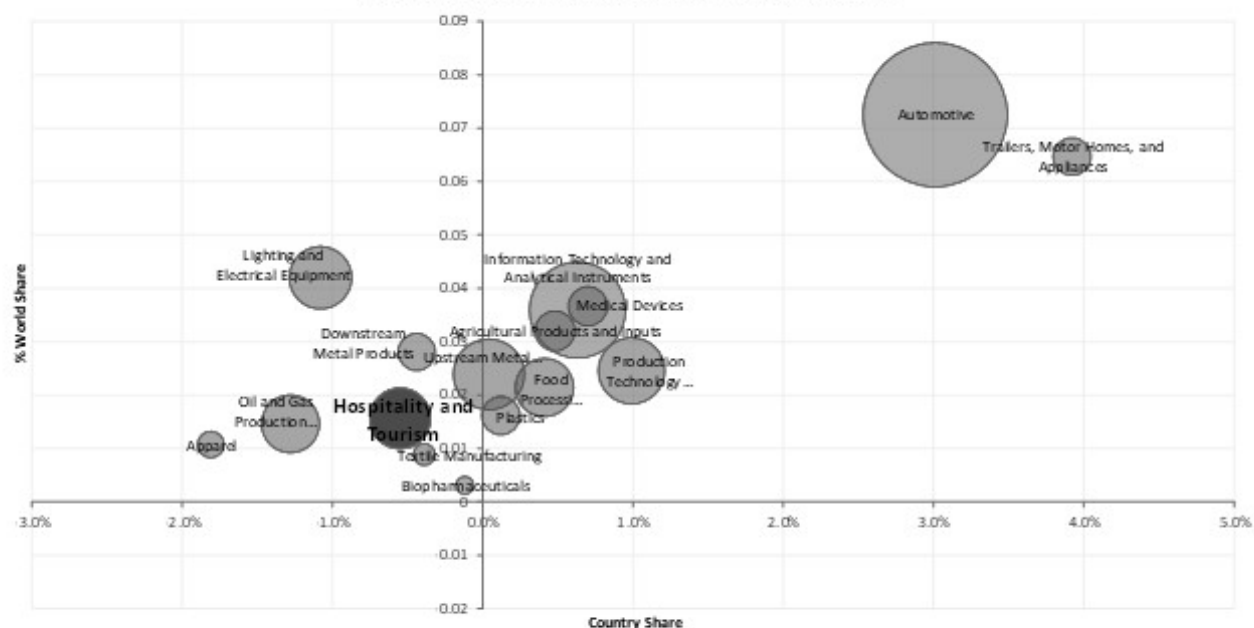


1.4 Cancun Region

1.1.4.1 Overview of the Quintana Roo Region, Cancun and Riviera Maya

The Quintana Roo area was the seat of the Mayan people known as Izaes, from the south of the country and who founded Siyancan Bakhallal around 435 BC and Chichen Itza between 495 and 514. At the beginning of the 50's and 60's Cancun was a very depopulated region, inhabited only by managers of coconut plantations and caretakers of Mayan ruins.

2016 Cluster Country Export (80/20) - México



Source: Cluster Mapping, Institute for strategy and Competitiveness, HBS

By 1968, in the midst of a social crisis, President Gustavo Díaz Ordaz commissioned a National Tourism Plan from the Bank of Mexico (Banxico). In 1969, Banxico created INFRATUR, now known as FONATUR (National Tourism Fund) which would develop a tourist resort through a loan of \$ 27 million. At that time, Quintana Roo had a little more than 40,000 inhabitants which were concentrated in Chetumal, Cozumel and Isla Mujeres (Tejada Sobrino & Valencia Pajón, 2008).

The Cancun region was chosen as the main destination and the extraordinary white beaches with turquoise blue sea had a lot to do with, as well as the beautiful Nichupté salt water lagoon. The key to taking advantage of this feature was to use the tongue that separated the lagoon from the sea to build and locate hotels and other important meeting points such as the Convention Center. To connect the island with the mainland, in the first model of the city, an avenue was built that ran through the hotel zone to the city center, where schools, medical facilities, public services and single-family homes were organized in “super- apples” (Cancún Government, s.f.).

Illustration 1 Map geographical location Quintana Roo State



Since its creation in 1971, the city of Cancun, Q. Roo, has become one of the fastest growing cities in the Mexican Republic (INEGI, 2017), Tourism has generated the attraction

of large investments and numerous jobs, as well as demanded infrastructure in all sectors, mainly as housing construction for all kinds of social classes. In 2017, Quintana Roo was the second state with the highest economic growth in the country, due to the boom in tourism. According to information from the National Institute of Statistics and Geography (INEGI), the GDP of Quintana Roo expanded 7.6% for 2016, a growth only surpassed by Aguascalientes, with 9.5% (INEGI, 2017). With an offer of accommodation of 98 thousand rooms, Quintana Roo (federative entity to which Cancun belongs) is considered the jewel of Mexican tourism and is the benchmark of the sector. The growth of Quintana Roo even exceeds that observed in China, where the economy expanded at a rate of 6.7% in 2016. It also means triple the growth recorded by the average of the Mexican economy last year, of 2.7% (Diario de Yucatán, 2017).

1.4.2 Government

The participation of the Government within the tourism sector of the country is essential, this will depend on the transformation of this sector important for the economy, as well as the collaboration and co-responsibility of several people, entities, institutions, etc. This will have as a positive consequence the use of tourism potential. Taking advantage of the country's tourism potential requires the coordinated action of all the actors involved. To achieve this, we actively promote the harmonization of the legal framework and the articulation of programs and actions in tourism with federal entities and municipalities, as well as with the academy, the private sector and the social sector, in a collaborative context, co-responsibility, rationality and transparency. To achieve this, several actions must be taken, which are summarized below:

- Strengthen the Institutional Capacities of the Tourism Sector
- Establish Instruments that harmonize government actions with national tourism policy and promote co-responsibility.
- Promote intergovernmental coordination in tourism.

Strengthen the mechanisms for consultation with the academy, the private sector and the social sector, for the benefit of tourism, with the University of the Cloister of Sor Juana A.C. support was formalized for a project called “linkage model for the creation of innovative and productive gastronomic tourism value chains” based on traditional

cultivation methods and / or endemic ingredients or with designation of origin (SECTUR, 2017).

1.4.3 Business Environment

Mexico occupies the sixth place as a tourist destination in the world and that opens the door to investments and business opportunities in this sector.

Tourism is a good business, both for companies dedicated to this type of services and for destinations and local communities.

The fact that Mexico is ascending from the eighth place to the sixth in the list of the World Tourism Organization, has great importance at national and international level.

Internally, the economic flow generated by tourism is transformed into greater jobs and prosperity for the regions visited. For this reason, sector development policies come with a high priority in their implementation.

In Mexico, the tourism sector has seen great advances that are reflected not only in that sixth place as a preferred tourist destination in the world, but in data such as these:

- In 2017, the number of international tourists who visited Mexico increased by 12%, which amounted to 39.3 million.
- Foreign tourism income rose to 8.7%, bringing this amount to \$ 21.3 billion. 59% of tourists were American, 16% Latin American, 11% European, 10% Canadian and 4% from the rest of the world.
- The favorite destinations were the beach, highlighting Cancun, Isla Mujeres, and Nuevo Vallarta (Secretary, 2018).

The importance of the tourism industry for the economy of Mexico is manifested in the fact that it ranks as the third most important source of income in the country, behind the automotive industry and the remittances of the countrymen abroad.

Tourism and investment opportunities

Mexico stands out among the favorite destinations of international tourists, boosting investments and business opportunities.

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The Ministry of Tourism recognizes the role of the sector as creator of jobs and engine of the national economy by

negotiating and implementing programs to contribute to its development, for example by promoting non-traditional tourist sites that include archeological, adventure or history tourism in its offer, establishing air connectivity between destinations within the same country and large international cities promoting the attraction of travelers and developing infrastructure to allow greater visitor traffic using new technologies for tourist service.

However, the work of promoting tourism and the quality of the services offered is not only attributed to the government, but also tourism service providers such as transportation, walks, accommodation and food invest heavily in their facilities and the training of their staff to please visitors, offering a wide variety of services, diversity of prices and activities while maintaining the quality of care and investing in the conservation of the environment, since tourism is an economic trigger for a region.

II. ANALYSIS OF THE CANCUN TOURISM CLUSTER

2.1 Factors conditions

The position of tourism in Mexico generates an important competitive advantage. In the last decade it has shown substantial changes from the development of efficient policies that are controlled from the Ministry of Tourism SECTUR, towards the impulse of foreign investment, and the position of the national tourism brand.

Cancun is a strategic axis for tourism development generating an important concentration on tourism GDP. Recreational tourism spending according to indicators of INEGI, World Bank and the SCT during 2018 represents in trillions of dollars US \$ 125.89 with a contribution to GDP in trillions during 2018 of US \$ 190.99, while the total staff employed in services from 61.13% with an unemployment rate of 3.42% in the country. According to the total staff employed in 2018, 3.2% represents the% of the total employed in tourism services (INEGI, 2017), (World Bank, 2018).

Graph 7 shows the summary in the tourism diamond in Cancun.

Advantages:

The advantages of the conditions of the factors that the tourism cluster has are indicated:

- Most important airport in Latin America, 24 million passenger hub.
- High quality electrical transmission and fiber optic network
- Road infrastructure throughout the tourist corridor.
- Mayan train construction plan
- Personnel trained in different languages and attention to tourism.
- Universities and schools for bachelor's degrees, postgraduate degrees in tourism and gastronomy, as well as high quality shopping centers, luxury and duty free
- Hospitals and health city for medical tourism.

Disadvantages:

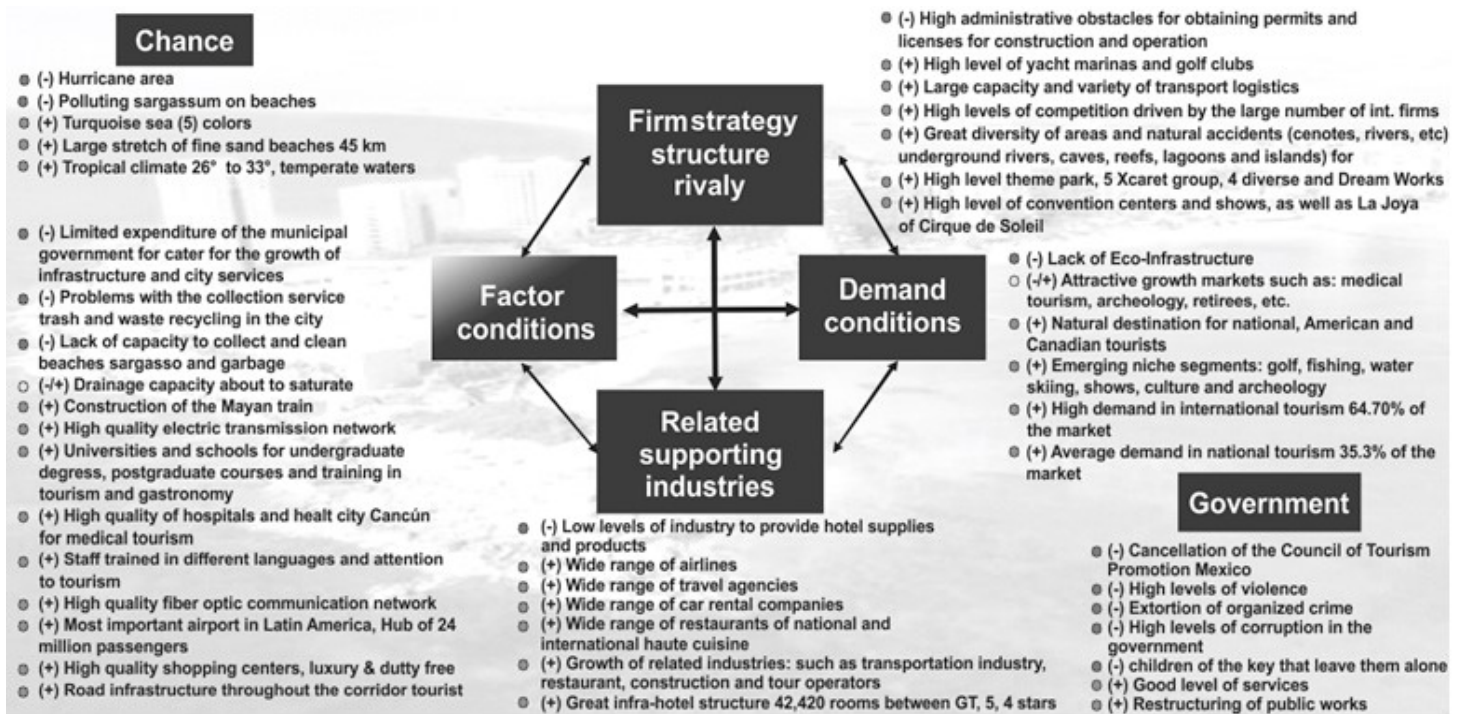
- Limited expenditure of the municipal government to supply the growth of infrastructure and services of the city
- Problems with the garbage collection and waste recycling service in the city
- Lack of ability to collect and clean beaches (sargassum and trash)
- Drainage capacity about to saturate.

2.1.1 Strategy Structure and Rivalry of Companies

The strategy, structure and rivalry of companies as a determinant of competitive advantage shows the capacity of the tourism sector within the region and the main disadvantages that are generated around this generic strategy for the construction of the tourism cluster in Cancun.

Advantages:

- High levels of competition driven by international hotel firms.
- Logistics transport capacity and variety.
- Diversity of areas and natural accidents (cenotes, underground rivers, caves, reefs, lagoons and islands) for tourism appreciation and adventure.
- Theme parks, 5 Xcaret group, 4 different and Amiko of dreams Works under construction.
- High level of convention and entertainment centers, as well as La Joya del Circo de Solei.
- High level of yacht marinas and golf clubs.



Graph 7 Tourism Diamond Cancun

Disadvantages:

- Administrative obstacles to obtain building and operating permits and licenses.

2.1.2 Demand Conditions

Cancun is a source of natural resources, attractive to the tourism sector and mainly for investors, a source of economic dynamism that allows the improvement of the living conditions of the population at the regional level, it is established that Cancun competes and positions itself in the market attracting domestic demand and with a predilection at the level of international demand.

Advantages:

- Natural destination for national, American and Canadian tourists.
- Niche emerging segments: golf, fishing, water skiing, shows, culture and archeology.
- Attractive growth markets such as: medical, archaeological, retired tourism, etc.
- High demand in international tourism 64.70% of the market.
- Average demand in national tourism 35.3% of the market.

2.1.3 Related and Auxiliary Sectors

The related industries and auxiliary to tourism generate a great regional and national dynamism, the increasing use of different services, and the implementation of new tendencies within the territorial expansion in the construction of new advantages make this industry generate an important value chain for its strengthening.

Advantages:

- Large hotel infrastructure 42,420 places between GT, 5, and 4 stars.
- Growth of related industries: such as transportation, restaurant and tour operators.
- Wide range of travel agencies, airlines, car rental companies.
- Variety of national and international haute cuisine restaurants.

Disadvantages:

- Low levels of industry to provide hotel supplies and products.
- Low educational level of the population.

2.1.4 Government

The incidence of government within the tourism sector since the 40's has strongly influenced the substantial changes that the sector has had, and events have been unfolding according to the political and ideological trends of the different heads of state. The effects of the different policies considered in history show important international agreements while also demonstrating the lack of transparency.

Being the government one of the factors to analyze emphasizing the current context defines the advantages and disadvantages that contribute to the mod.

Advantages:

- Restructuring of public works, allowing important road access within road and highway connections.
- Accessibility to a good level of services, promoters of development.

Disadvantages:

- Cancellation of the Tourism Promotion Council Mexico.
- High levels of violence.
- Extortions of organized crime.
- Levels of corruption in government.
- Children of the key (his parents work all day and they stay home alone).

2.1.4 Opportunities

The most important advantages for the cluster are the environmental diversity, the territorial extension and the capacity in infrastructure and services that it offers, showing at the regional level an efficient development aligning the services for a sustainable growth.

Advantages:

- Large stretch of fine sand beaches 45 km.
- Turquoise sea (5) colors.
- Tropical climate 26 ° to 33 °, temperate waters.

Disadvantages:

- Polluting sargassum on the beaches.
- Hurricane Area.

2.2 FORCE ANALYSIS

The development of the tourism sector has generated a great dependence on international hotel chains that generate volatility in the economic dimension and establish their own conditions, which significantly affect the stability of the sector.

For the analysis of the 5 forces, graph 8 shows the corresponding information.

2.2.1 Threat of New Entrants

The decrease in the positioning of a tourism brand generates a loss of sustainability in the tourism sector and support industries. The increase in international marketing chains that are positioned in other locations, replacing the main attractions with other destinations.

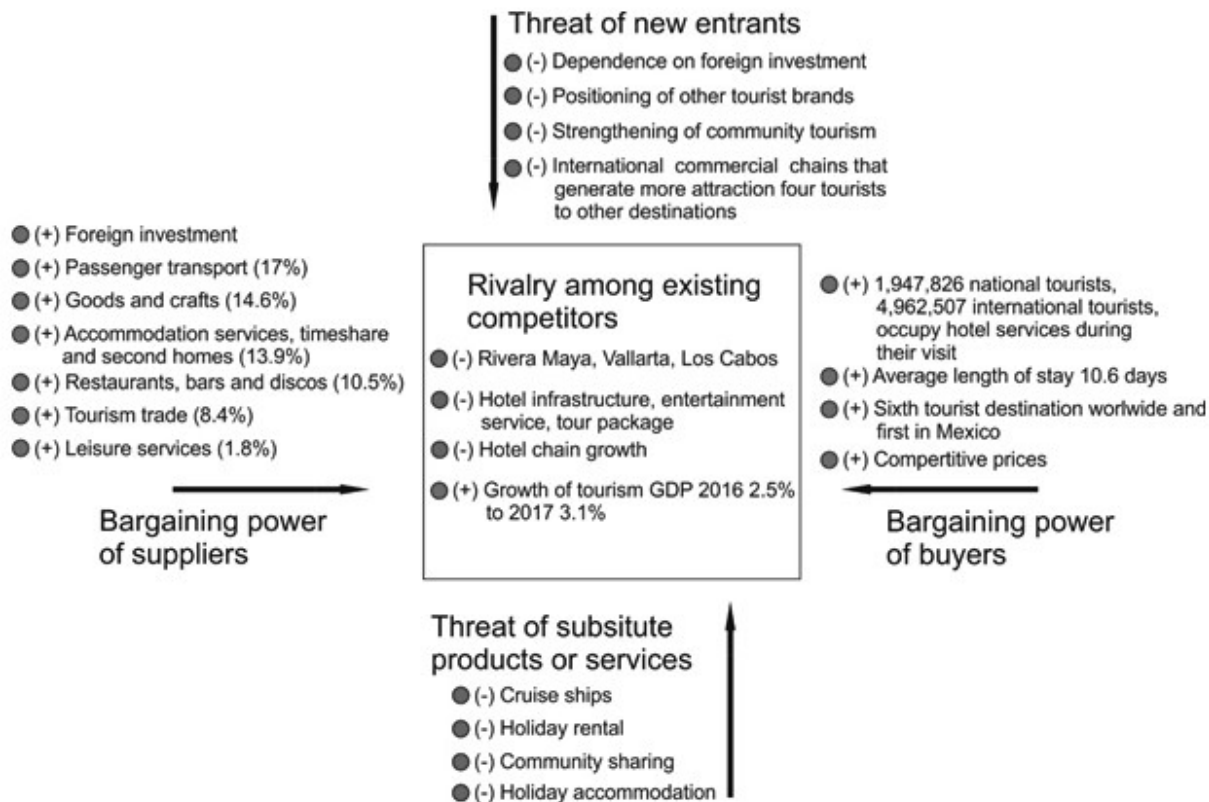
2.2.2 Bargaining Power of Buyers

The tourism sector reflects the position of variability in its areas, the housing capacity, the time of stay and the economic capacity of the clients that acquire a tourist service mainly in the hotels, resort, in relation to the main areas, we can analyze the number of visitors, guests, average length of stay, travel expenses, accommodation and arrivals.

The results analyzed show a trend of destination preference to the United States and Spain, followed by Mexico, where greater weight of the analyzed items is concentrated and there is a substantial difference in the travel expenses item, demonstrating that the greatest weight is the United States that Mainly the focus of the tourist destination is the commercialization of goods.

From this context it can be determined that there are important advantages for the context of tourist attraction:

- 1,947,826 national tourists, 4,962,507 international tourists, occupy the hotel service during their visit.
- Average length of stay 106 days.
- Sixth tourist destination worldwide and the second tourist destination in Mexico.
- Competitive prices.
- Exchange rate
- International hotel firms



Graph 8: Forces Analysis

2.2.3 Threat of Substitute Product or Service

The new trends of generating family rest spaces, depending on the purchasing power and access capacity through the use of technology, have made much of the hotel service lose competitive advantage over the development of the sector, the increasing increase of Cruises can be evidenced that offer an important range of services included all in one, they have been reducing importance to the stay and the generation of value on the hotels, capturing important market especially with high purchasing power.

The family stay on holiday accommodation also becomes a major threat that must be considered for the development of strategies to attract the market.

2.2.4 Bargaining Power of Suppliers

The bargaining power of suppliers is limited to the investment capacity, infrastructure, and ability to position the main industries in the market.

Among the strengths and advantages, in relation to the bargaining power of suppliers are:

- Foreign investment.
- Passenger transport (17.0%);
- Goods and crafts (14.6%);
- Accommodation services, timeshare and second homes (13.9%);
- Restaurants, bars and discos (10.5%);
- Tourism trade (8.4%),
- Leisure services (1.8%).
- Travel agencies (1.0%).

2.2.5 Rivalry Among Existing Competitors

The main competitors at the level of the region are: Riviera Maya, Vallarta, Mexico City and Los Cabos, these hotel spaces have been growing and strengthening, considering the hotel capacity Cancun has a wide capacity, but these establish their positioning and are potential competitors within the region.

- Hotel infrastructure, entertainment service, tourist package.
- Tourism GDP growth 2016 2.5% to 2017 3.1%.
- Growth of international hotel chains.
- Competitive prices in the market.
-

2.3 VALUE CHAIN

The priority of the Tourism Cluster in Cancun is to turn tourism into a development engine for the national economy of Mexico, as well as continue to generate a development factor in the town of Benito Juárez municipality and in the state of Quintana Roo. Through a recompositing of competitiveness created with the new sub clusters from the development of the related industry that Cancun has generated. Having as mission the offer of shared value in the new development niches.

Next, graph 9 shows the integrated diagram of the value chain of the Cancun Tourism cluster.

2.3.1 Firm Infrastructure

Positively generates foreign investment in hospitality and related industry, the hotels have a wide variety of hotels and resorts from GT, 5.4 and 3 stars. There are complementary services within all these hotels.

2.3.2 Human Resource Management

There are areas of opportunity in the attitude of service and attention to tourists, more language management than Spanish and English are required, there is a growing number of influential unions. In addition, the importation of human resources is needed for strategic positions of greater value, together with the constant training and training of local employees.

2.3.3 Technology

There are points to improve in communication and internet services. It is necessary to regulate the entry of technology and legal aspects to offer services such as Uber, Cabify, Lyft, etc. As well as expand the cellular network to 5G through fiber optic and Tv-Cable services. Finally, using ecotechnologies.

2.3.4 Procurement

Constant adjustments are needed in the services of experience providers, such as shows, parks, culture, archeology, shopping centers, etc. As well as improving supply chains in food and supply services for the industry. Ending with the improvement of service providers and medical care since it is expensive and limited.

2.3.5 Inbound Logistics

In this area there are important advances in infrastructure such as the Cancun International Airport. Which generates the main engine of arrival of tourists to the destination, however, it should be emphasized the improvement of the docks and a high draft port where international cruises can be received as in Cozumel.

2.3.6 Operations

This segment concentrates a high efficiency, offering different types of services and rates, as well as a high and recognized gastronomy. Efficient work is being done to offer sophisticated shows at convention centers and hotels. However, there are issues such as sargassum and insecurity that endanger these advances.

2.3.7 Outbound Logistics

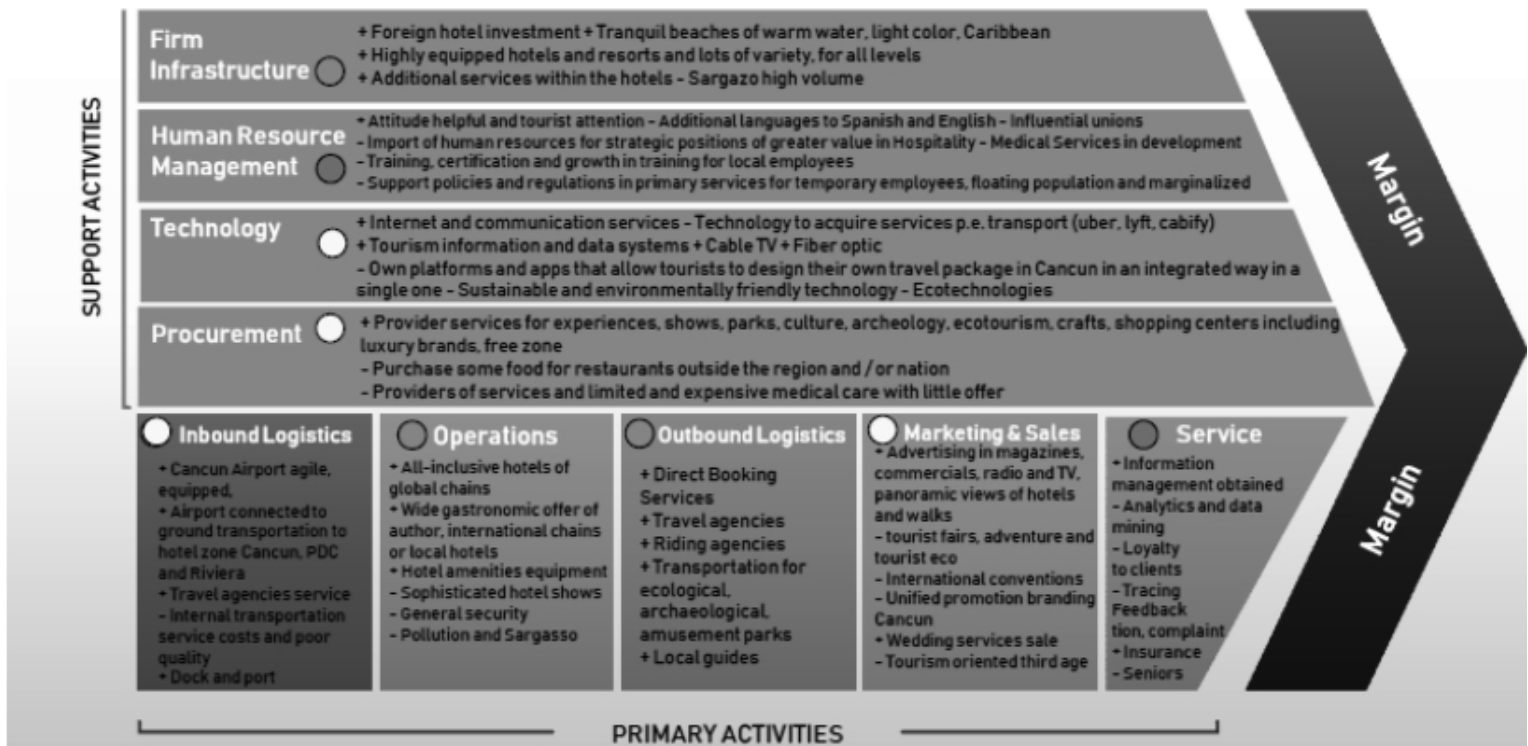
The services of direct reservations, call centers and CRM, are up to the international average, having to make observations in the travel agencies, tour operators and transporters that really fulfill what they offer to tourists.

2.3.8 Marketing & Sales

Also, here Cancun must be promoted with a value creation offer, in which it can reach the target markets in a more efficient way, especially once the tourism promotion council has been canceled by the federal government, the Cancun branding has lost presence in the main points of sale around the world. This implies that there are many areas of opportunity such as banquets, weddings, seminars, etc., where the destination should be promoted.

2.3.9 Service

There are alerts about information management and data mining, where in synthesis, you will have to work on the



Graph 9: Value Chain

III. SHARED VALUE PROPOSAL

Big Data of customer information in Cancun, in order to track, satisfy and, above all, reward visitors' loyalty.

Another of the most important aspects that should be improved is the creation of industrial parks in the city of Cancun, since as shown in the figure below, the related industry has been developing in record time, mainly due to growth and the demand of destiny. However, there are not enough suppliers of articles and supplies in the city that can meet the demand, having to depend on foreign suppliers with which the price and delivery time is affected. More detail can be seen in Annex 4.

2.4 CLUSTER MAP

Graph 10 shows the map of the tourism cluster, where hotels and resorts are located in the central part, while its support industry is reflected in 40 universities, 24 hospitals, tourism schools, water services, communications, garbage collection, energy, public safety, construction among others. In the lower right part, the sectors to be developed and potentialized are shown due to the impact of the main players on the map, such sectors are for example agribusiness, aquaculture, mechanical metal manufacturing industry, etc.

Derived from what was found in the previous analyzes, the unique shared value proposal is developed, which will be developed in detail in the next section of this document.

Based on the analysis of the Diamond, the 5 forces, cluster map and value chain, the single shared value proposal is established, which is detailed below:

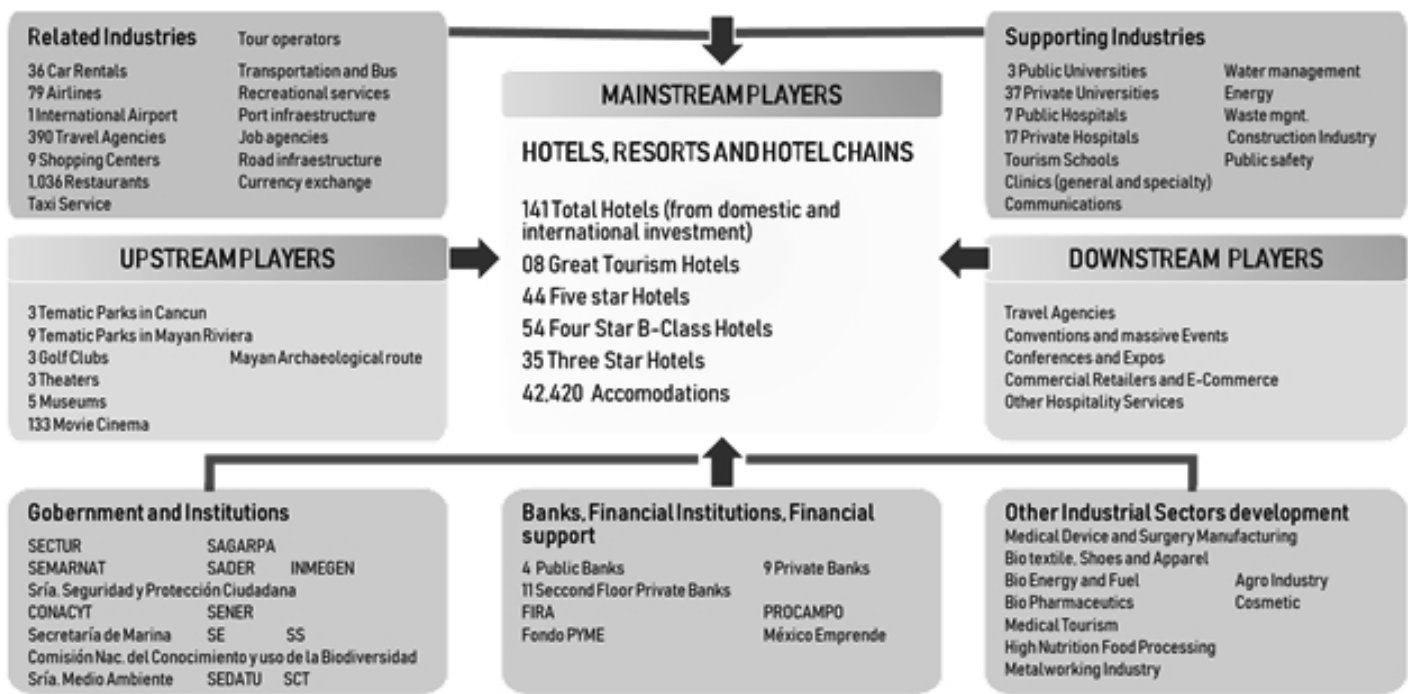
3.1 UNIQUE SHARED VALUE PROPOSITION FOR CANCUN TOURISM CLUSTER

Develop a Tourism sub-cluster: Tourism for retired and Medical – Geriatric

The population pyramid in developed countries increases in adults over 65 years and the tendency is to continue increasing (Pyramid, 2019), for example, in the European continent the population of 48 countries is expected to decrease by 15% by 2050 (United Nations, 2019), as well as the worldwide increase in life expectancy in 3 years.

This “senior” segment of the population in first world economies such as Europe, the United States and Canada, is characterized by high purchasing power and stable income due to its retirement plans (Rodríguez, 2014), enjoy good health and conditions to travel and relocate your retirement location in regions with warm-temperate climate and more favorable conditions close to sea level.

In addition, they seek fun and attention that promotes the tourism-related industry, more requires specialized medical attention or finding comfortable regions to treat a condition. According to INEGI and CONAPO data, older adults in



Mexico went from 6.2% of the population to 7.2% of the population and it is expected to continue increasing in the following years (INEGI, Expansión Economía, 2015) waiting for 2020 by 14 million and by 2030 20.4 million older adults (CONAPO, 2019).

This tourism segment tends to be of more demanding quality and seeks comfort and safety in the organization of trips. In addition, you can travel at any time of the year, and spend long periods of stay if the place seems attractive (Alonso, 2017).

On the other hand, it is a group “at risk” given the diseases that are more accentuated with age or are typical of the elderly, as well as the decrease in the functioning of the senses and different organs of the human body.

Given the conditions that Cancun provides and the entertainment and culture infrastructure it currently has, it is an attractive destination, but the lack of security in health services means that senior tourists do not extend their stays.

The development of the tourism sub-cluster aimed at retired senior citizens and geriatric care is proposed, which will allow access to this segment of the population with a lower cost to medical services and care (given the parity of exchange rate), as well as its protection for long periods in retirement homes under a holiday scheme.

The approach to this value proposition requires important elements of immediate treatment, for example, the reduction of energy costs and the use of sustainable generation technologies to keep Cancun as an attractive alternative. Also,

contain the problem of sargassum invasion on the beaches of Cancun so that they remain clean at all times of the year and continue to attract tourism.

3.2 SUCCESS AND RISK FACTORS

The following shows the relationship between the analyzes developed and the challenges and opportunities for the development of competitiveness in the region. For this sub cluster of medical-geriatric retirement.

Analysis	Challenge / Opportunity for Competitiveness
Value chain	<ul style="list-style-type: none"> Lack of sustainable infrastructure Little use of eco technologies High costs due to saturation of general services High consumption of polluting energy
Cluster Map	
Cluster Map	
Diamond	

Starting from the previously developed analyzes, the following challenges and opportunities of shared value are obtained for competitiveness in the problem of the high tons of sargassum that currently affect the tourist beaches of the region:

Analysis	Challenge / Opportunity for Competitiveness
Diamond	<ul style="list-style-type: none"> Containment of Sargassum invasion Reduction of tourism by sargassum Sargassum "manual" collection and cleaning Lack of knowledge in sargassum management Little use of eco-technologies High consumption of polluting energy
5 Forces	
Value Chain	
Cluster Map	

Derived from needs to support the medical-geriatric retirement tourism sub cluster, and the containment of the challenge that the sargassum problem has brought to make it an opportunity, the following table shows the proposed Bio Eco Energies cluster, which will serve to support future operations of the current tourism cluster, as well as other clusters in the region.

Analysis	Challenge / Opportunity for Competitiveness
Value chain	• Lack of sustainable infrastructure
Cluster Map	• Little use of eco technologies
Cluster Map	• High costs due to saturation of general services
Diamond	• High consumption of polluting energy

As a risk, investors must not be able to agree on such ambitious projects and that several of them collapse or fail to consolidate for the benefit of the society of the region, another is that it is not possible to obtain the investment amounts to continue with the project, which could delay execution and successful results.

Likewise, there is a risk that the financing is not insufficient to complete the expected projects or that the government does not carry out its role of potentiating the projects in the precise time or before a lot of bureaucracy, carrying out corruption schemes.

3.3 PROPOSED PROJECTS

Below are the suggested recommendations and projects, as well as the action phase and its relationship with other cluster projects, consolidating an attractive and unique shared value proposal for the development of this Medical-Geriatric Retirement Tourism sub-cluster, as well as the new Sargasso industry cluster and the new Bio Energies cluster, which will allow to move from an economy supported by capital and foreign investment tourism, to the generation of productivity, diversification of activity towards manufacturing in high industry value (such as medical and surgical), sophistication of the human resource towards high-value services and subsequently promoting innovation in medical-pharmaceutical research derived from the sargassum problem, as well as research to turn it into the opportunity to start a new industry of Bio and Eco Energies as well as the textile and footwear industry with bio materials (Varillas, 2019), food industry of high nutritional value, and the impulse of the aquaculture of said algae to meet the demand and create greater sources of better paid employment in a transversal way with the development of this sub-cluster and its derived clusters ..

The proposed recommendations and projects are placed in 3 phases of action according to the time of time where it is recommended to execute each project, they are also classified according to their objective where there are 4 different categories:

- 1) Productivity: The productivity objective is to systematize the cluster to reach efficiency levels, which will serve to "educate" the diamond little by little and advance to the next level objective.
- 2) Sophistication: The objective of sophistication is that once the cluster is efficient, raise its position in research and development to increase its value proposition and improve the level of knowledge and competitiveness of the region's social system by developing new products and services with greater value and attractiveness.
- 3) Innovation: At the third level, the innovation objective satisfies the investment in research and development of new technologies, creation of high-value products that can be imported into other regions and that increase the attraction of monetary and intellectual capital in the region, so that the diamond is "perfected".
- 4) Support: This last objective satisfies the projects necessary to support the growth and evolution of the diamond towards an innovation economy.

The enablers column refers to the enabling impact on different value segments, such as infrastructure, demand, human resources, high value employment, ecology and high value research.

The suggested parties column refers to the institutions involved for the operation of the proposal, as well as the private and activity sectors that must also intervene.

Finally, Linked Clusters (C) and Sub-Clusters (SC) correspond to clusters and sub clusters that will be positively influenced with the development of projects and value propositions.

The following box shows the proposal for this main sub-cluster: Tourism medical-geriatric for retired people.

Recommendations and projects: Sub Cluster Tourism retired medical-geriatric	Objective	Enabler	Suggested Parties involved	Action Phase	Linked Clusters (C) and sub-clusters (SC)
Develop technical schools of crafts and training in manufacturing	Productivity, Support	Human resource	SEP, STPS,	1	SC. General manufacturing
Creation of sustainable industrial parks oriented to medical manufactures	Productivity, Support	Infrastructure	Real estate and construction developers	1	C. Construction, Manufacturing, C. Energy
Attraction of companies (GE, Siemens, 3M) manufacturers of consumables and medical equipment, local consumption and export	Productivity, Support	High value employment	CONACYT, STPS, SE	2	C. Medical Manufacturing
Develop nursing technical schools	Sophistication	Human resource	SEP, SS, Hospital Investors, Headhunters	1	SC. Geriatric and retirement doctor
Creation of tourist products for the senior age	Sophistication	Demand	Travel agency, SECTUR, SEDESO, IAAM,	2	C. Turismo, SC Geriatric and retirement doctor, Insurance
Attract major national and international universities with medical programs	Sophistication	Human resource	CONACYT, SS, National educative system	2	SC. Medical Geriatric and Retirement, C. Bio Pharmaceutical
Attraction of national and international talent for medical research in senior diseases	Innovation	Human resource	CONACYT, SS	2	SC. Geriatric and retirement doctor
Creation of medical technology research centers	Innovation	High value research	CONACYT, SE	3	SC. Medical Geriatric and Retirement, C. Medical Manufacturing
Creation of geriatric medical research centers	Innovation	High value research	SS, CONACYT, High level local and foreign universities	3	SC. Geriatric and retirement doctor
Attract pharmaceutical and bio-pharmaceutical industry	Innovation	High value employment	SE, CONACYT, STPS	3	SC. Medical Geriatric and Retirement, C. Bio Pharmaceutical
Consolidate current developments and orient them to facilities for the elderly	Support	Infrastructure	Real estate and construction developers	1	SC. Medical Geriatric and Retirement, C. Construction

Build hospitals and clinics of high value and vanguard oriented to the treatment of common diseases of the senior population	Support	Infrastructure	High Value Hospital Investors	1	SC. Medical Geriatric and Retirement, C. Construction
Unique brand creation Cancun - Senior	Support	Demand	Marketing and advertising companies SECTUR	2	SC. Geriatric and Retirement Physician, Marketing Industry
Financial and insurance products for pension collection and transfers to the Mexican financial system (collection accounts, investments, TDC, etc.)	Support	Demand	Banca, BDM	2	C. Turismo, SC Geriatric and retirement doctor, Insurance
Build developments for long stays and retreats	Support	Demand	Real estate and construction developers	2	SC. Geriatric and retirement doctor

As mentioned above, future related clusters that can act together creating shared value towards the sophistication of the Cancun region are based on the treatment and production of sargassum, the products derived from it and the innovation in new products and related industry that Can supply and create.

Sargasso, for example, can be used in the textile and footwear industry, generating bio materials for the production of ecological shoes, for example. (Morgan, 2019). The following boxes show the projects for the new proposed cluster of the sargassum industry:

Recommendations and projects: New Sargassum industrial cluster	Objective	Enabler	Suggested Parties involved	Action Phase	Linked Clusters (C) and sub-clusters (SC)
Investment machinery and equipment to accelerate collection (Dakatso Group specialized catamarans development: 300 kg in 2 min)	Productivity	Human resource	Investment by hoteliers, SECTUR, SE, Local government	1	C. Tourism
Develop technical schools of trades, machine tools, and training in metalworking manufacturing	Productivity	Human resource	SEP, STPS	1	SC. General manufacturing
Development of university programs in marine sciences, aquaculture and marine ecosystem	Sophistication	Human resource	SEP, SAGARPA, SADER, SEDATU	1	SC. Aquaculture
Educational programs in cultivation and growth under controlled schemes	Sophistication	Human resource	SEP, SAGARPA, SADER, SEDATU	2	C. Sargasso Industry, Aquaculture

Institutions supporting SMEs main industry and related in innovation of products based on Sargasso	Sophistication	Demand	México Emprende, Fondo Pyme, ProMéxico, CANACO	3	C. Sargasso industry, SC. Bio textile and footwear, C. Bio plastics, SC. Food Processing, C. Bio Pharmaceuticals, C. Bio Energy, SC. Cosmetic, C. Aquaculture
Develop technology to transform the collected product into clean energy -Biogas- to generate electricity and bio fuel (Low emission fuel)	Innovation	High value research	CONACYT, SES, Scientific Research Center Yucatán, ExxonMobil combustible low emission).	2	C. Sargasso industry, C. Bio-Eco Energies, C. Manufacturing
International universities R&D agreements "on site" for uses. (University of California, Australia Aquaculture in Massachusetts)	Innovation	High value research	CONACYT, SE, Elite Universities	2	C. Sargasso industry
Creation of research centers for sargassum use	Innovation	High value research	CONACYT, SE	3	C Sargasso industry, C. Bio-Eco Energies
Creation of institutions focused on research, development of new products and properties of Sargassum	Innovation	High value research	Elm innovations social venture, UNAM, IPN, UY	3	C. Sargasso industry
Creation of regulatory Institution, use of aquifer fields, exploitation	Support	Ecology	SAGARPA, SADER	2	C Sargasso industry, Aquaculture
Development of aquatic fields for controlled growth in specific areas and meet new product demand.	Support	Ecology	SAGARPA, SADER, PROCAMPO	2	C. Sargasso industry, Aquaculture, C. Marine bio technology

According to research from institutions such as MIT and Universities in California and Australia, sargassum can be used as a component of livestock feed that can reduce the methane they emit in their digestion (40-60%) and impact on the reduction of the footprint carbon (Temple, 2018).

Other research supports that sargassum can be used in an innovative way in the cosmetic, pharmaceutical and additive industries in foods of high nutritional value (Varillas, El Universal, 2018) (Notimex, 2018), while companies such as ExxonMobil investigates in the formulation of low emission fuel and biogas from sargassum, as well as the Yucatan Research Center in accelerating the transformation process using fungi and microorganisms that increase the efficiency of micro reactors to generate biogas that can be used directly in power generation (Zanolli, 2019).

Projects derived from the challenges and opportunities detected that recommend the creation of a Bio Energy cluster:

In summary, it is expected that with the creation of this sub-cluster of medical and geriatric tourism, as well as the formation of clusters derived from the sargassum and bio-energy industry, better employment opportunities of greater value will be generated and the population will be better prepared to work in them, perfecting their knowledge, increasing their purchasing power and conditions of prosperity.

Recommendations and projects: New Bio Energy cluster	Objective	Enabler	Suggested Parties involved	Action Phase	Linked Clusters (C) and sub-clusters (SC)
Development of university programs in bio and sustainable ecotechnology	Sophistication	Human resource	SEP, Elite Universities	1	Sustainable energy
International universities R&D agreements "on site" for uses. (University of California, Australia Aquaculture in Massachusetts)	Innovation	High value research	CONACYT, SE, Elite Universities, SENER	2	C. Bio y Eco technologies
Develop technology to transform the collected product into clean energy -Biogas- to generate electricity and biofuel (Low emission fuel)	Innovation	High value research	CONACYT, SE, SENER, Yucatan Scientific Research Center, Exxon Mobil	2	C. Sargasso Industry, C. Bio-Eco Energies, C. Manufacturing
Creation of regulatory Institution, use of aquifer fields, exploitation	Support	Ecology	SAGARPA, SADER	2	C. Sargasso Industry, Aquaculture
Development of aquatic fields for controlled growth in specific areas and meet new product demand	Support	Ecology	SAGARPA, SADER, PROCAMPO	2	C. Sargasso Industry, Aquaculture, C Bio marine technology
Creation of institutions focused on research, development of new bio and eco energy products from sargassum	Innovation	High value research	CONACYT, UNAM, IPN, UY, SENER	3	C. Sargasso Industry, C. Bio-Eco Energies, C. Manufacturing

3.4 CONCLUSIONS AND RECOMMENDATIONS

Based on the previous analyses (Cluster Map (CM), Value chain (VC), and Diamond), the research team has come to the following conclusions and recommendations with shared value, which we have grouped into several dimensions.

In summary, what is proposed is the generation of a high-value sub-cluster, and derived from the current tourism situation in Cancun, innovative high-value clusters that potentialize other clusters can be developed in parallel.

Derived from the unique value proposition on the **Sub-Cluster of retirement and medical-geriatric tourism**, the following clusters are derived:

Cluster Sargassum production and manufacturing cluster, which in turn would impact the following clusters:

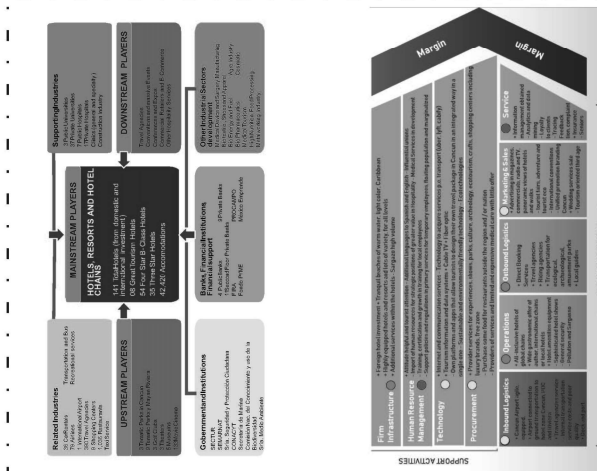
- Technology and manufacturing of heavy machinery
- Apparel and Bio Textile

- Bio Plastics
- Bio Pharma
- Production and processing Aquaculture products

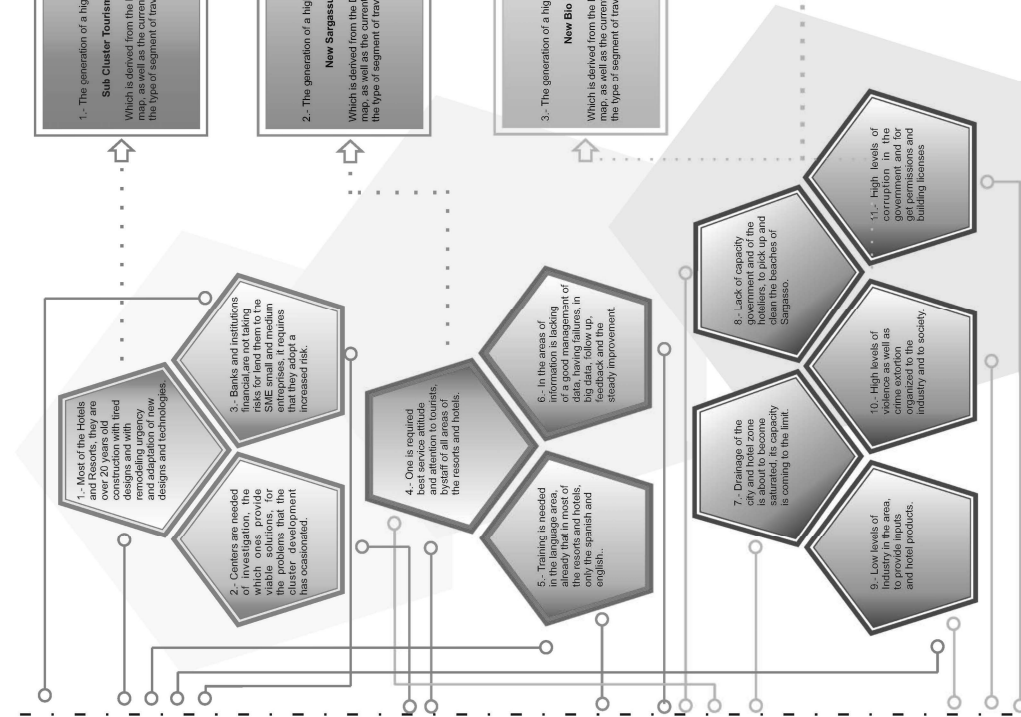
Generation cluster of Bio - Eco Energy, from sargassum and other sustainable sources, which in turn would generate influence and impact on the development of bio fuel and bio energy.

These clusters are of high value in innovation, aiming to give the region's society a better education and better jobs of greater value, which favor the purchasing power of the inhabitants and thereby improve their living conditions, reducing the economic gap and turning Cancun into a more attractive and prosperous region for its population.

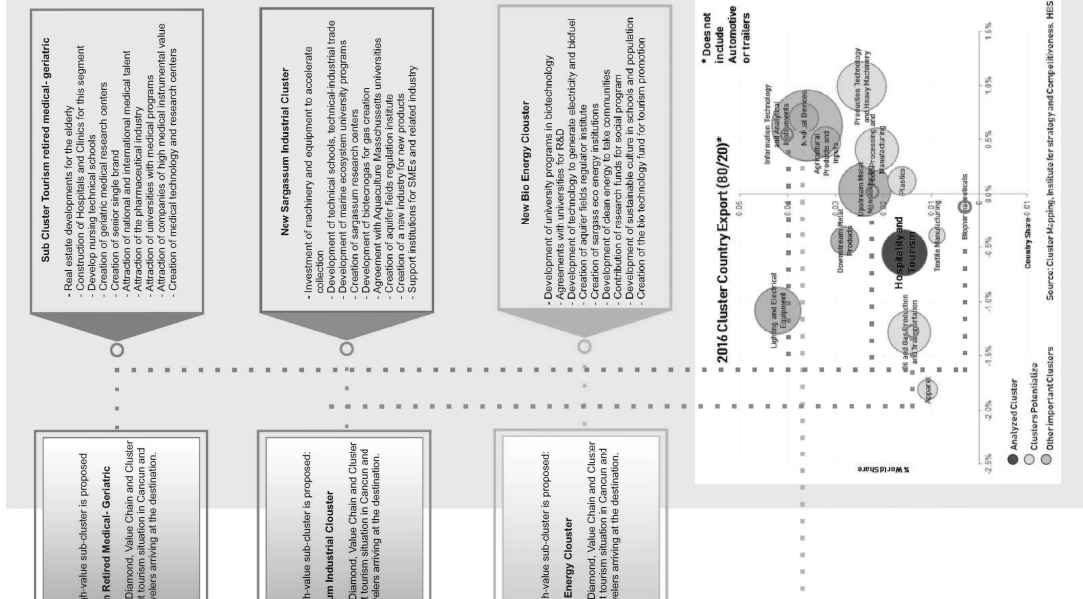
ANALYSIS



CONCLUSIONS



RECOMMENDATIONS AND SHARED VALUE



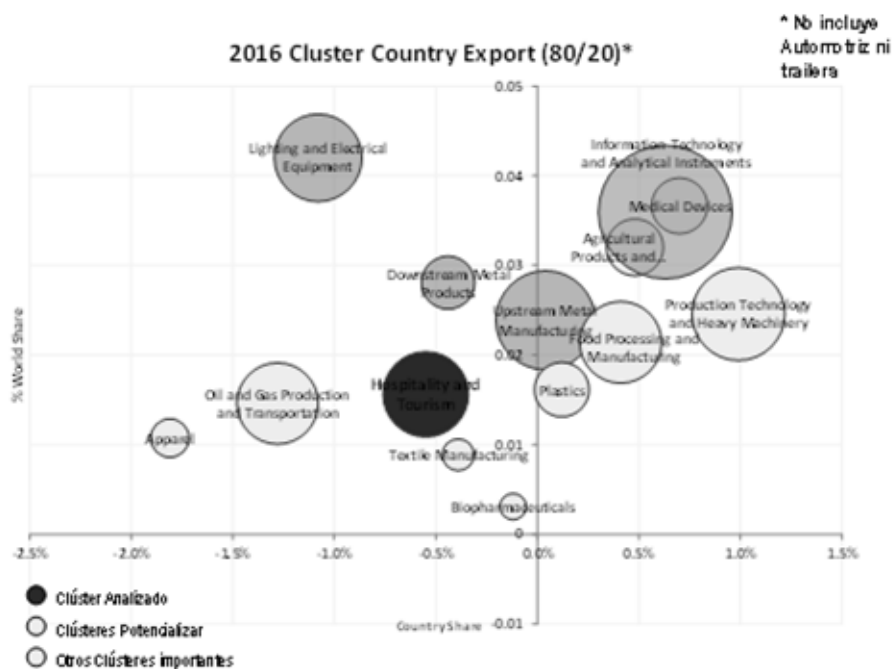
3.5 FUTURE STATE VISION OF CLUSTERS AFTER VALUE PROPOSITION IMPLEMENTATION

The knowledge about tourism that has already been developed in the Cancun region will be decisive for the success of this project, in addition to the population adopting new knowledge to work in future new sources of employment. Derived from the **Sub cluster of medical and geriatric tourism, the industrial cluster of Medical-Surgical Manufacturing** can be favorably affected, as well as Research in Bio Medicines.

On the **Sargasso production and manufacturing cluster** there would be important influence on.

In Graph 14, you can see a greater detail of the favorable impact of what was proposed as a Future State Vision of Clusters after Value Proposition Implementation:

- **Sub Clúster de Turismo Médico- Geriátrico**
 - Manufactura Médico-Quirúrgica
 - Investigación y Bio Medicina
- **Clúster Producción y manufactura de Sargazo**
 - Tecnología y manufactura de Maquinaria pesada
 - Apparel y Bio Textil
 - Bio Plásticos
 - Bio farmacéutica
 - Producción y procesamiento productos Acuicultura
- **Clúster Generación Bio Energía de Sargazo**
 - Bio combustible
 - Bio Electricidad



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ANNEX

Annex 1: General profile of Mexico in numbers

Politician <ul style="list-style-type: none"> • Presidential regime (6 years) • • Representative, democratic and federal republic • • 31 Autonomous States and a Federal District • Supreme power of the Federation: • • Executive - President (6 years) • • Legislative - Congress of the Union • • Judicial - Supreme Court of Justice, the Electoral Court of the Judicial Branch of the Federation, the Collegiate Circuit 	Economic <ul style="list-style-type: none"> • • GDP per capita \$ US 9,304 • • GDP at market prices (\$ US billion) 1,151 • • GDP growth 2.04% • • Annual inflation (2018): 4.41% • • Exports of goods (current US \$) 409.49 • • Imports of goods (current US \$) 432.15 • • Total external debt (current US \$ millions) - (2019) 206,913 • • Exchange rate Peso-USD: 19 	Social <ul style="list-style-type: none"> • Population (2018) 131,788,270 • • Population growth 2.16% • • Unemployment, total (% of total workforce) 3.42% • • Urban population (% of total) 79,867 • • Life expectancy at birth (years) 79.5 • • Health expenditure (% of GNP) - Public 3.26%, Private - 3.4% • • Kms paved roads to 2018: 171,347
Legal and business environment <ul style="list-style-type: none"> • • 12 International Free Trade Agreements with 46 countries • • 32 Agreements for the Promotion and Reciprocal Protection of Investments (APPRIs) with 33 countries • • 9 agreements of limited scope within the framework of the Latin American Integration Association (ALADI). • • Foreign direct investment, net flows (current US \$ - inflows) billion 32.17 	Education <ul style="list-style-type: none"> • Public spending on education% of GDP - (2016) 2.7% • • Adult literacy rate (2015) 5.5 • • Technological Universities: 114 • • Polytechnics: 62 • • Public Research Centers: (CPI, CONACYT): 27 • • Higher Level Schools: 5,343 	Tourism <ul style="list-style-type: none"> • • International tourism tickets (current US \$ trillion expenditure) 1,449 • • Tourism contribution to GDP (US \$ bill 2018) 190.99 • • Personnel employed in tourist services (% of total employee-2018) 3.20% • • Business tourism expenditure (US \$ billion-2018) 16.72 • • Spending on leisure tourism (US \$ billion-2018) 125.89 • • Personnel employed in industry (% of total employee) 25.76% • • Accommodations: 76,017

Source: Statistical data: Indicators: (World Economic Outlook Database, 2019) (INE, 2018) (Trading Economics Data, 2019) (IMF, 2019) (INEGI, 2017) (World Bank, 2018)

Annex 2: Evolution of the government on public policies 1947-2018 |

Sexennial	Minimum salary, D.F.	Inflation (%)	GDP Base 2013	GDP (%)	Events
Miguel Aleman (1947-1952)	6.70	-2.19	1,333.349	4.03	0% overvalued weight. Exports increase, reserves rise. They founded National Indigenous Institute and General Directorate of Tourism. Construction of 14,548 social housing and 5,069 schools, four dams. Torre Latino begins. Salamanca Refinery. FC Sonora- Baja California.
Adolfo Ruiz Cortines (1952-1958)	12.00	3.90	1,931.221	5.28	Devaluation planned at \$ 12.50 / D1. Economic growth remains. Movements of political turmoil produce uncertainty. I vote for the woman. Expropriates northern estates. Construction of four dams, F.C. of the Pacific, road network 32224 km. Latin Tower ends.
Adolfo López Mateos (1958-1964)	21.50	5.40	2,797.739	11.01	The "Old Debt" of 1941 is completed, Mexico places 100MDD in bonds for 1st time in 50 years. Sexennial almost perfect. Railroad repression, imprisoned leaders. The Electric Industry is nationalized. The ISSSTE is created. Good relationship with the USA and Cuba. 20137 km of roads and 38 dams begin. Madero refinery is built. Mexico-Puebla highway. National Medical Center.
Gustavo Díaz Ordaz (1964-1970)	32.00	4.69	4,019.769	6.50	Mexican Peso "Fuerte" is used by the IMF in support credits to Brazil and Canada. External debt / GDP, increased from 5.5% to 9.2% in 1970, a good result despite 68. Mov. Student, 100,000 march, Matanza de Tlatelolco. Olympics, World Cup. LADA service begins, route 2 and 3 of the subway, Puebla-Orizaba highway, Mexico-Tecamac-Pyramids, Qro-Irapuato are inaugurated. Road network 71,520km.
Luis Echeverría Álvarez (1970-1976)	96.70	27.20	5,686.833	4.42	Expedited growth spending and nationalization are financed with Ext Debt. Three new secretariats. Inflation gallops, fixed parity and overvalued peso. 272 state companies. CCE is born. Struggle between working class and business class, E. Garza Sada is murdered, the guerrillas proliferate in Guerrero. Cancun's tourist area arises. Great work of the System Deep Drainage, operates Saltillo-Monterrey. Oil zone is discovered. La Angostura Dam is inaugurated, the largest in Mexico.

Sexennial	Minimum salary D.F.	Inflation (%)	PIB Base 2013	GDP (%)	Events
José Lopez Portillo (1976-1982)	364.00	98.84	8,287.534	-0.52	We bet on oil, Mexico 4th place worldwide. The boom in oil production begins (Campeche). Interest rate goes up, barrel price falls. Devaluations, capital flight, chaos. The nepotism blooms. Confidence crisis and capital flight begins. State Bank and Change Control, Empty Coffers are decreed. Road network 212,626km. 4 million phones Construction Refinery in Salina Cruz. Tele informatics network.
Miguel de la Madrid (1982-1988)	8,000	51.66	8,440.163	1.28	Reservations fall, the EIRP is born. Mexico without credits for more than two years. 85,184 MDD are paid for external debt and interest. Oil price falls, stock market crash, inflation 159%. Gray selenium Earthquake grade 8.1, 8000 dead. Passive attitude, high inflation, slippage and devaluation. Solidarity Pact. Computer system falls in elections, Salinas elected. Digital telephone system starts, route 9 of the subway is inaugurated. Guaymas-Nogales Highway, Rail Network: 26398km tracks. In orbit satellites Morelos.
Carlos Salinas de Gortari (1988-1994)	15.27	7.05	10,667.86	4.94	Salinas privatizes Cia Mexicana de Aviación and Aeroméxico. Grupo Carso acquires Telmex. The bank returns to private hands. Exports rise, controlled parity, low inflation, investment, reserve rises. They approve NAFTA. Country was on the edge of the abyss. PRONASOL blooms. High consumption and credit opening, drives widespread private debt. Rising in Chiapas. They assassinate Colosio and Ruiz Massieu. There are 58 airports (32 international). Start cell phone. 313,000 cell phone users. Aguamilpa Dam and Route 8 of the D.F. and No.1 of Monterrey. Features: populism, neoliberalism.
Ernesto Zedillo (1994-2000)	37.90	8.96	12,932.92	4.94	Zedillo faces the worst crisis, but Mexico is well off. Exports grow. Concession of 10461km of roads to Ferromex. 713,000 new jobs are created. Free Trade Agreement with the European Union. 8-month strike at UNAM, Fox elected, ends with 71 years of PRI rule. The "Mochaorejas" falls. New Children's Hospital begins operations. 26 oil platforms in Campeche. Double the number of cell phone users, 14.07 million. Cadereyta Refinery, N.L.

Sexennial	Minimum salary, D.F.	Inflation (%)	GDP Base 2013	GDP (%)	Events
Vicente Fox (2000-2006)	48.67	4.05	14,511.30	4.50	After 9/11 bags of the World fall. Recession begins in the USA and affects Mexico. Inflation 3.98% the lowest since 1968, open unemployment grows to 3.29%. Senate approves Federal Transparency Law. Discover Pemex Gate. PAN loses strength, the PRI is strengthened. 21.7 million cell phone users. The AICM Project of Texcoco is canceled. Infonavit formalizes 242,000 credits. Calderón wins elections, electoral conflict, hectic takeover.
Felipe Calderón (2006-2012)	62.33	3.57	16,059.72	3.64	US economic crisis begins, banks go bankrupt, crisis affects Mexico. Ups and downs in Mexico's GDP and inflation. The Estela de Luz, Line 12 of the Metro, the tallest bridge over Rio Fuerte, is built. Urban Highway of Quota, unfinished. Enrique Peña Nieto wins elections.
Enrique Peña Nieto (2012-2018)	88.36	4.83	18,519.09	1.99	EPN starts with economic slowdown, GDP falls and housing construction. Low growth in six years, oil exports fall, external and internal debt and dollar rises. Dollar very expensive. 34 young people disappear in Iguala without a trace. President Trump, threatens wall, deportations and renegotiation NAFTA. Durango highway to Mazatlán opens. NAFTA is renegotiated. NAIM construction begins.
Andrés Manuel López Obrador (2019-2024)					AMLO president of Mexico, cancel NMCA (New Mexico City Airport).

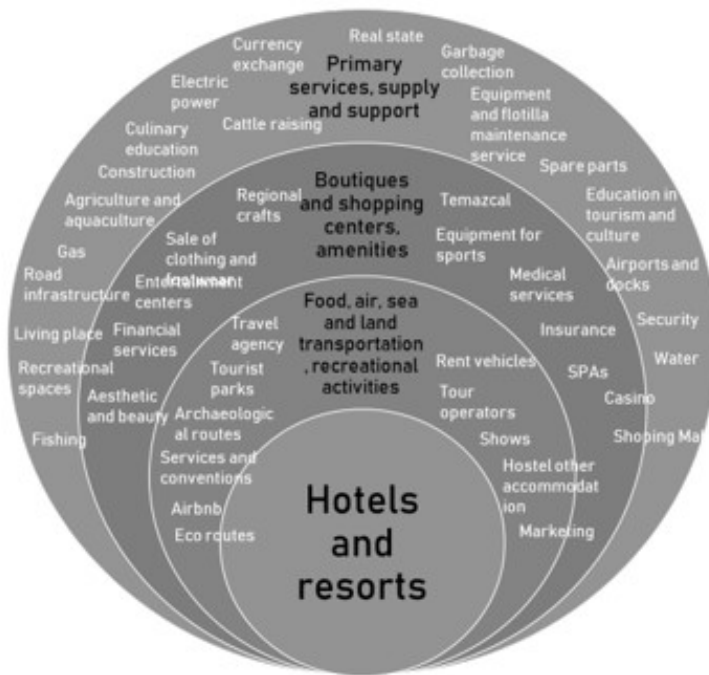
Source: Statistical data: Indicators: (World Economic Outlook Database, 2019) (INE, 2018) (Trading Economics Data, 2019) (IMF, 2019) (INEGI, 2017) (World Bank, 2018)

Annex 3: Analysis of participation behavior by clusters 2005-2016

Cluster Name	country's share change	country share end year	Cluster Name	country's share change	country share end year
Vulcanized and Fined Materials	0,20%	2,02%	Nonmetal Mining	0,35%	2,06%
Upstream Metal Manufacturing	0,04%	2,39%	Metalworking Technology	-0,31%	1,02%
Upstream Chemical Products	-0,09%	0,72%	Metal Mining	1,25%	2,43%
Trailers, Motor Homes, and Appliances	3,92%	6,47%	Medical Devices	0,70%	3,67%
Tobacco	0,48%	0,59%	Livestock Processing	0,59%	1,17%
Textile Manufacturing	-0,39%	0,89%	Lighting and Electrical Equipment	-1,08%	4,20%
Recreational and Small Electric Goods	-0,06%	1,46%	Hospitality and Tourism	-0,55%	1,56%
Production Technology and Heavy Machinery	0,99%	2,46%	Furniture	-0,28%	1,30%
Printing Services	0,07%	1,52%	Food Processing and Manufacturing	0,41%	2,14%
Plastics	0,12%	1,62%	Automotive	3,01%	7,25%
Paper and Packaging	0,13%	0,87%	Apparel	-1,81%	1,08%
Oil and Gas Production and Transportation	-1,28%	1,46%	Agricultural Products and Inputs	0,48%	3,20%

Source): (Harvard Business School, 2016)

Annex 4: Related Industry



141 Total Hotels

08 GT Hotels

54 -4 Stars-B. Class Hotels

35 -3 Star Hotels